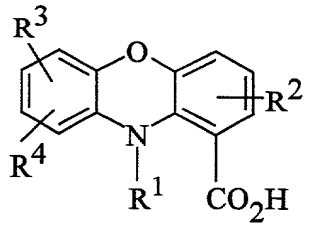
CLAIMS

What is claimed is:

1. A compound of the Formula I



I

and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof,

wherein:

R^1 is hydrogen, lower alkyl, or cycloalkyl;

R^2 is hydrogen; lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino;

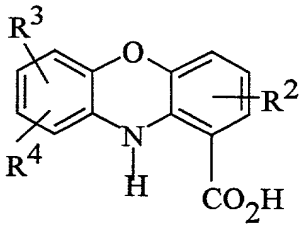
R^3 and R^4 independently are hydrogen, lower alkoxy, aryl, heteroaryl, halogen, hydroxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, mono- or dialkylamino, or

lower alkyl or lower alkenyl unsubstituted or substituted with one, two or three groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino, or

aryl or heteroaryl optionally substituted independently with up to three groups selected from halogen, lower alkyl, lower alkoxy, hydroxy, carboxy, alkoxycarbonyl, cyano, nitro, trifluoromethyl, amino, mono- or dialkylamino, carbamoyl, carboxyalkyl, alkoxycarbonylalkyl, sulfamoyl, or carbonylamino, or

R^3 and R^4 together form a carbocyclic group containing from five to seven members, up to two of which members are optionally heteroatoms selected from oxygen and nitrogen, where the carbocyclic group is optionally substituted with one or two groups selected from halogen, lower alkyl, lower alkoxy, mono- or dialkylamino, aryl, arylalkyl, or a heterocyclic group.

2. A compound of the Formula II



II

and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof,

wherein:

R^2 is hydrogen, lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino;

R^3 and R^4 independently are hydrogen, lower alkoxy, aryl, heteroaryl, halogen, hydroxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, mono- or dialkylamino, or

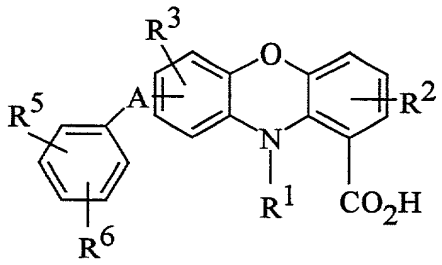
lower alkyl or lower alkenyl unsubstituted or substituted with one, two or three groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino, or

aryl or heteroaryl optionally substituted independently with up to three groups selected from halogen, lower alkyl, lower alkoxy, hydroxy, carboxy, alkoxycarbonyl, cyano, nitro, trifluoromethyl, amino, mono- or dialkylamino, carbamoyl,

carboxyalkyl, alkoxycarbonylalkyl, sulfamoyl, or carbonylamino, or

R^3 and R^4 together form a carbocyclic group containing from five to seven members, up to two of which members are optionally heteroatoms selected from oxygen and nitrogen, where the carbocyclic group is optionally substituted with one or two groups selected from halogen, lower alkyl, lower alkoxy, mono- or dialkylamino, aryl, arylalkyl, or a heterocyclic group.

3. A compound of the Formula III



and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof,

wherein:

A is absent, or is

lower alkyl or lower alkenyl unsubstituted or substituted with one or two groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino;

R^1 is hydrogen or lower alkyl;

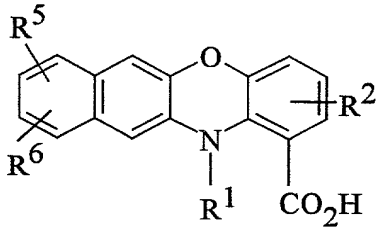
R^2, R^5, and R^6 are independently hydrogen, lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino; and

R^3 is hydrogen, lower alkoxy, aryl, heteroaryl, halogen, hydroxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, mono- or dialkylamino, or

lower alkyl or lower alkenyl unsubstituted or substituted with one, two or three groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino, or

aryl or heteroaryl optionally substituted independently with up to three groups selected from halogen, lower alkyl, lower alkoxy, hydroxy, carboxy, alkoxycarbonyl, cyano, nitro, trifluoromethyl, amino, mono- or dialkylamino, carbamoyl, carboxyalkyl, alkoxycarbonylalkyl, sulfamoyl, or carbonylamino.

4. A compound of the formula



and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof,

wherein:

R^1 is hydrogen or lower alkyl; and

R^2, R^5, and R^6 are independently hydrogen, lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino.

5. A compound according to Claim 1, which is selected from:

Phenoxazinecarboxylic acid;

3-Nitrophenoxazinecarboxylic acid;

3-(Phenylmethoxy)phenoxazinecarboxylic acid;

9-Chloro-8-(trifluoromethyl)benzo[b]phenoxazinecarboxylic acid;

Benzo[b]phenoxazinecarboxylic acid;

8,9-Dimethylbenzo[b]phenoxazinecarboxylic acid;
8,9-Dihydroxybenzo[b]phenoxazinecarboxylic acid;
8,9-Dichlorobenzo[b]phenoxazinecarboxylic acid;
7-Phenylphenoxazinecarboxylic acid;
7-(3,4-Dichlorophenyl)phenoxazinecarboxylic acid;
7-Benzylphenoxazinecarboxylic acid;
7-[(3,4-Dichlorophenyl)methyl]phenoxazinecarboxylic acid;
7-[2-(3,4-Dichlorophenyl)ethyl]phenoxazinecarboxylic acid;
8-(3,4-Dichlorophenyl)phenoxazinecarboxylic acid;
3-Nitrobenzo[b]phenoxazinecarboxylic acid;
3-Nitro-8-phenylphenoxazinecarboxylic acid;
7-[2-(3,4-Dichlorophenyl)ethyl]-3-nitrophenoxazinecarboxylic acid;
7-[3-(3,4-Dichlorophenyl)-3-oxoprop-1-enyl]-
3-nitrophenoxazinecarboxylic acid;
7-[3-(3,4-Dichlorophenyl)propyl]-3-nitrophenoxazine carboxylic acid;
7-[3-(3, 4-Dichlorophenyl)-3-hydroxypropyl]-3-nitrophenoxazine
carboxylic acid; and
3-Amino-7-[3-(3,4-dichlorophenyl)propyl]phenoxazine carboxylic acid.

6. A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of Claim 1.

7. A method of inhibiting the aggregation of amyloid proteins to form amyloid deposits, the method comprising administering to a patient in need of inhibition of the aggregation of amyloid protein an amyloid protein aggregation inhibiting amount of a compound of Claim 1.

8. A method of imaging amyloid deposits, the method comprising:
   a. introducing into a patient a detectable quantity of a labeled compound according to Claim 1;
   b. allowing sufficient time for the labeled compound to become associated with amyloid deposits; and

c. detecting the labeled compound associated with the amyloid deposits.

9. The method of Claim 10 wherein the patient has or is suspected to have Alzheimer's disease.

10. The method of Claim 10 wherein the labeled compound is a radio labeled compound.

11. The method of Claim 10 wherein the labeled compound is detected using MRI.